

REMARKS

This is in full and timely response to the above-identified Office Action. The above listing of the claims supersedes any previous listing. Favorable reexamination and reconsideration are respectfully requested in view of the preceding amendments and the following remarks.

Claim Amendments

In this response, claims 1-3 have been amended, and claims 4-10 have been cancelled.

It is respectfully submitted that the claims currently pending and examined in the application are allowable over the cited references, for at least the reasons set forth below.

Rejections under 35 USC § 112

In this response the term "development" has been removed from claims 1-3 and the use of the term "alternately" has been clarified in claim 2. It is therefore submitted that the issues raised under 35 USC § 112, second paragraph are overcome. Reconsideration is respectfully solicited.

Rejections under 35 USC § 102

1) The rejection of claims 1 and 2 under 35 USC § 102(b) as being anticipated by US 6,359,380 to Nishizawa et al. (hereinafter Nishizawa) is respectfully traversed for at least the following reasons.

(a) Difference in Objects

The object of Nishizawa is to prevent reflection and improve the prevention of the development of static charge in color CRT. This is done by including a phosphor layer in different colors in an internal surface of a glass panel and providing an electric

conductive surface film capable of selectively absorbing light on an outer surface.

In contrast, the claimed subject matter is directed to providing a multicolor glass vessel capable of generating a plurality of different colors and therefore possessive of highly aesthetic optical properties. In addition, the claimed subject matter is directed to providing a high adhesion property by laminating a hardened coating film, made of predetermined resins with a predetermined thickness, over the surface of the glass vessel and then coating the color generating layers with different refractive indices thereon.

Therefore, the claimed subject matter is directed to a structure which differs markedly from that of Nishizawa et al.

(b) Difference of Structure (Optical Transparency)

Also, the present invention relates to a multicolor glass vessel provided with predetermined multilayer films relative to the surface of glass and using reflection of light.

In contrast, Nishizawa is an invention related to the color CRT using optical transparency in the surface of glass.

Therefore, it is clear that the present invention which does not use the optical transparency in the surface of glass wherein the light is reflected in the multilayer films and the invention of Nishizawa utilizing the optical transparency in the surface of glass, differ as a structure.

(c) Difference of Structure (Multilayer Film)

In the invention, a hard coating film with a predetermined thickness made of a predetermined resin is coated on the glass surface, and then, the vapor deposition layers with a low refractive index such as silica layer, and a high refractive index such as titanium layer are sequentially formed also via vapor deposition.

In contrast, although Nishizawa discloses the lamination of multiple vapor deposition layers with different refractive indices, the invention of Nishizawa laminates a thin film with a high refractive index relative to the surface of glass, and then, a thin film with a low refractive index is laminated, so that the structure of Nishizawa is reverse in the order of lamination of the invention.

Therefore, the structure of multilayer films of the present invention differs from that of Nishizawa.

(d) Structural Difference (Hardened Coating Film)

Also, the claimed invention includes a hardened coating film with color and a predetermined thickness comprising polysiloxane-based resin, melamine resin, or the like between the surface of base glass and the multilayer films comprising multiple vapor deposition layers.

In contrast, Nishizawa does not contain any disclosure or suggestion regarding providing a hardened coating film which has a color and predetermined thickness and comprises polysiloxane-based resin, melamine resin, or the like between the surface of glass and the multilayer films.

In addition, Nishizawa, due to the need for optical transparency, cannot lead to laminate of a hardened coating film and color generating films, and cannot meet the claim requirements of a predetermined thickness or include polysiloxane-based resin, melamine resin, or the like which absorbs light and reduces the transmission rate of light.

Therefore, the claimed invention provided with this type of predetermined hardened coating film differs from Nishizawa which cannot provide the predetermined hardened coating film in terms of the claimed structure.

(e) Difference of Effect

The claimed invention can enhance the adhesion between the glass vessel and the multilayer films by providing the hardened coating film with the predetermined thickness comprising specific resins between the surface of glass and the multilayer films comprising the multiple vapor deposition layers.

Also, the claimed invention can produce multicolor properties exhibiting excellent aesthetic properties by alternately laminating a vapor deposition layer whose refractive index is low, such as a silica layer and the like and a vapor deposition layer whose refractive index is high such as a titanium layer.

Therefore, Nishizawa does not disclose that the hardened coating film is provided between the surface of glass and the multilayer films, nor indicate that the vapor deposition layers with different refractive indices are alternately laminated in an order from low to high. It is, therefore, clear that specific effects of the claimed invention cannot be obtained.

Namely, it is clear that the inventive step of the claimed invention cannot be denied based on Nishizawa whose object, structure, and effects obtained from there differ from those of the present invention.

2) The rejection of claims 1-5 under 35 USC § 102(b) as being anticipated by US 6,534,903 to Spiro et al. (hereinafter Spiro), is to the degree that it is still pertinent to the claimed subject matter, respectfully traversed.

(a) Difference of Object

The object of Spiro is such as to respectively reflect both visible light and infrared spectrum from a lamp by alternately laminating dielectric layers with different refractive indices on the glass in a glass reflective member.

Therefore, it is clear that the intent of the claimed invention to provide aesthetic excellence as well as high adhesion completely differs from that of Spiro

(b) Difference of Structure (Multilayer Film)

Also, Sprio discloses a structure which alternately laminates two kinds of vapor deposition layers whose refractive indices differ from each other, and an embodiment which alternately laminates the vapor deposition layer (TiO_2) whose refractive index is high and a vapor deposition layer (SiO_2) whose refractive index is low in order relative to the surface of glass.

However, in contrast, the claimed invention alternately laminates titanium layers whose refractive index is high on the vapor deposition layer whose refractive index is low such as a silica layer and the like, relative to the hardened coating film.

Therefore, it is clear that the claimed invention recites a structure comprising vapor deposition layers with different refractive indices opposite to that of Spiro so that the structure of the present invention differs from that of Spiro.

(c) Difference of Structure (Hardened Coating Film)

In Spiro, there is no disclosure or suggestion that the hardened coating film with a predetermined thickness comprising the specific resins is provided between the surface of glass and light diffracting multilayer films.

In contrast, the claimed invention includes a hardened coating film with a predetermined thickness comprising specific resins between the surface of base glass and multilayer films comprising the multiple vapor deposition layers.

Moreover, in the case of Spiro, since the infrared spectrum and the visible light has to be reflected, it is also clear that the hardened coating film with colors and the predetermined

thickness comprising polysiloxane-based resin, melamine resin, or the like which reduces a reflectance ratio, cannot be used.

Therefore, the structure of the claimed invention provided with the predetermined hardened coating film differs from that of Spiro which meet the predetermined hardened coating film requirements.

(d) Regarding the Difference of the Effect

In Spiro, there is neither disclosure of providing the hardened coating film with the predetermined thickness comprising the specific resins between the surface of glass and the multilayer films, nor the multilayer films. Thus, it clear there is not anticipation of the claims as they have been amended.

Namely, it is clear that the neither the novelty nor the inventive step of the claimed invention cannot be denied based on Spiro whose object, structure, and effect differ from those of the claimed subject matter.

3) The rejection of claim 6 under 35 USC § 103(a) as being unpatentable over US 6,534,903 to Spiro et al. in view of US 6,228,480 to Kimura et al. or Nishizawa et al. in view of Kimura, is to the degree that it is still pertinent to the claimed subject matter, respectfully traversed.

Also, the invention of Kimura is related to a photocatalyst-carrying structure whose object is to solidly adhere a photocatalyst relative to a substrate, and includes an adhesive layer comprising silicone-modified resin, colloidal silica, or polysiloxane which is a polymerization reaction product, between the substrate and a photocatalyst layer.

However, in Kimura, there is no disclosure or suggestion that the multiple vapor deposition layers whose refractive indices differ from each other are alternately laminated in a predetermined

order as the multilayer films which are the main structural requirement of the present invention.

Therefore, in Kimura, it is clear that the effect of the present invention wherein the multicolor properties can be obtained by alternately laminating the multiple vapor deposition layers whose refractive indices differ from each other in the predetermined order, cannot be obtained.

Namely, it is clear that the inventive step of the present invention cannot be denied based on Kimura.

3-1) Combination of Nishizawa and Kimura

In Nishizawa, there is no disclosure that when the multilayer films are structured relative to the surface of glass, SiO_2 or the like with the low refractive index and the titanium layers with the high refractive index are alternately laminated by the vapor deposition. Therefore it is clear that even if inventions of Nishizawa and Kimura are combined, the present invention cannot be structured.

Furthermore, as mentioned above, in the case of Nishizawa, as long as the subject-matter is CRT, the optical transparency is an essential requirement, so that it is clear that it cannot be provided with the hardened coating film with a predetermined thickness comprising the polysiloxane-based resin, melamine resin, or the like which reduces the light transmission rate.

Also, as long as the present invention cannot be structured even if the inventions of Nishizawa and Kimura are combined, it is clear that the effect of the present invention cannot be obtained.

Namely, even if Nishizawa and Kimura are combined, claim 1 of the invention is not obvious from Nishizawa and Kimura.

3-2) Combinations of Spiro and Kimura

In Spiro, there is no disclosure that when the multilayer films are structured relative to the surface of glass, the vapor

deposition layers such as the SiO₂ layer and the like with a low refractive index and the titanium vapor deposition layers with a high refractive index are alternately laminated. Therefore, it is clear that even if Spiro and Kimura are combined, the present invention cannot be structured.

Furthermore, as mentioned above, in Spiro, as long as the infrared spectrum or visible light with the predetermined wavelength has to be reflected, it is also clear that the hardened coating film with the predetermined thickness comprising polysiloxane-based resin, melamine resin, or the like which reduces the reflectance ratio, cannot be provided.

Therefore, even if Spiro and Kimura are combined, claim 1 of the invention is not obvious.

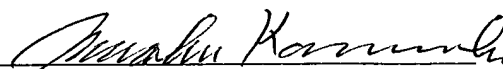
Conclusion

As explained above, claims pending in the application are patentable over the cited references.

Reconsideration and allowance are earnestly solicited.

Respectfully Submitted,

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